



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/810,623	03/19/2001	Elie Ayache	1776.0010002	8808
26111	7590	03/10/2006	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005				HAMILTON, LALITA M
ART UNIT		PAPER NUMBER		
3624				

DATE MAILED: 03/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/810,623	AYACHE, ELIE
<b>Examiner</b>	<b>Art Unit</b>	
Lalita M. Hamilton	3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 19 March 2001.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-6 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-6 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Kant (6,173,276).

Kant discloses a method and corresponding computer program product for pricing options comprising:

1. A method for pricing the current value of a basket option consisting of a plurality of underlying assets, comprising the steps of: receiving an input indicative of the spot value for each of the plurality of underlying assets within the basket option; receiving an input indicative of the risk free interest rate; receiving an input indicative of the diffusion parameters for the option; receiving an input indicative of the desired number of time slices; receiving an input indicative of the maturity date of the option; building a lattice, using said inputs, wherein the lattice is comprised of an elementary cell structure for each of said time slices; and traversing, in a backwards fashion, said lattice in order to calculate the value of the basket option from said maturity date to the present. (col.2, lines 24-53 and col.26, lines 10-55)
2. The method of claim 1, wherein the plurality of assets includes exactly two assets and said elementary cell structure is a hexagon. (col.2, lines 24-53 and col.26, lines 10-55—can be any shape)

3. The method of claim 1, wherein the plurality of assets includes exactly three assets and said elementary cell structure is a rhomba-dodecahedron. (col.2, lines 24-53 and col.26, lines 10-55-can be any shape)
4. The method of claim 1, wherein the plurality of assets includes exactly n assets and the number of sides of the shape of said elementary cell structure is given by the equation:  $(2n+1) - 2$ . (col.2, lines 24-53 and col.26, lines 10-55)
5. The method of claim 1, wherein step (1) comprises the steps of: receiving an input indicative of the correlation, p, of each asset to each other asset within the plurality of underlying assets; and (b) receiving an input indicative of the volatility, a, of each of the plurality of underlying assets. (col.2, lines 24-53 and col.26, lines 10-55)
6. A computer program product comprising a computer usable medium having control logic stored therein for causing a computer to price the current value of a basket option consisting of a plurality of underlying assets, said control logic comprising: a first computer readable program code means for causing the computer to receive an input indicative of the spot value for each of the plurality of underlying assets within the basket option; a second computer readable program code means for causing the computer to receive an input indicative of the risk free interest rate; a third computer readable program code means for causing the computer to receive an input indicative of the diffusion parameters for the option; a fourth computer readable program code means for causing the computer to receive an input indicative of the desired number of time slices; a fifth computer readable program code means for causing the computer to receive an input indicative of the

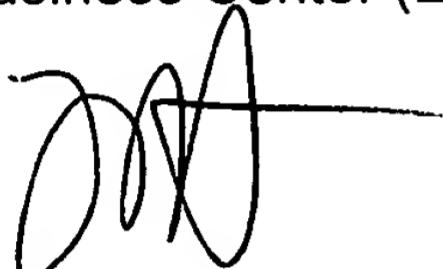
maturity date of the option; a sixth computer readable program code means for causing the computer to build a lattice, using said inputs from said first, second, third, fourth, and computer readable program code means, wherein the lattice is comprised of an elementary cell structure for each of said time slices, and a seventh computer readable program code means for causing the computer to traverse, in a backwards fashion, said lattice in order to facilitate the value of the basket option from said maturity date to the present. (col.2, lines 24-53 and col.26, lines 10-55)

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lalita M. Hamilton whose telephone number is (571) 272-6743. The examiner can normally be reached on Tuesday-Thursday (6:30-2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached on (571) 272-6747. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LMH